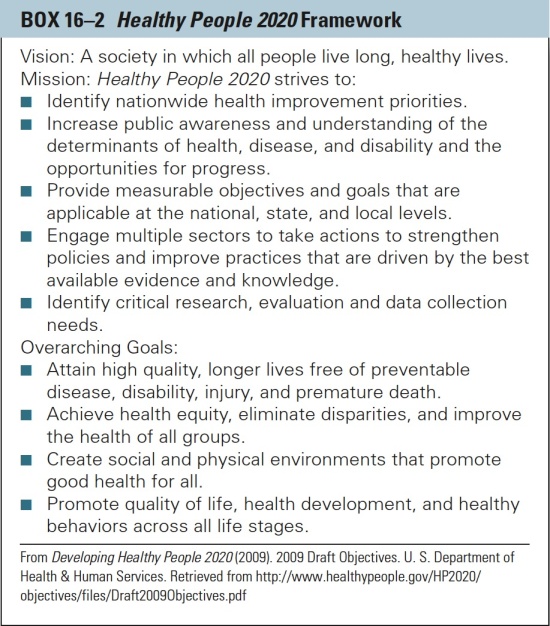
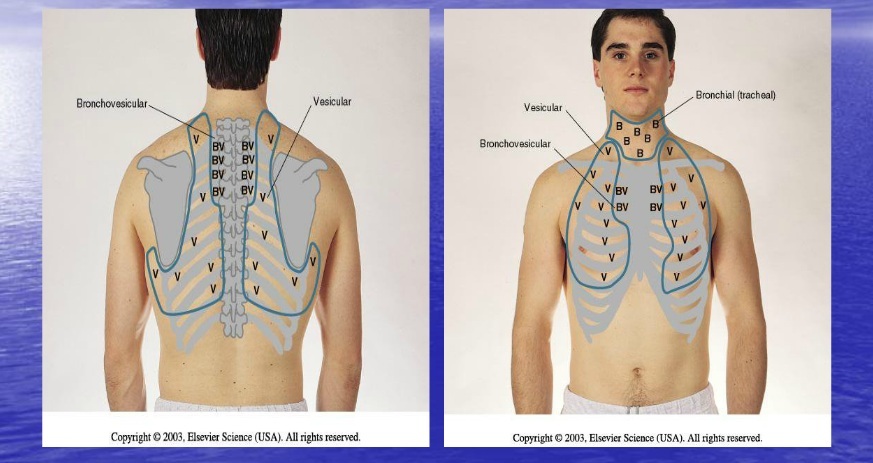
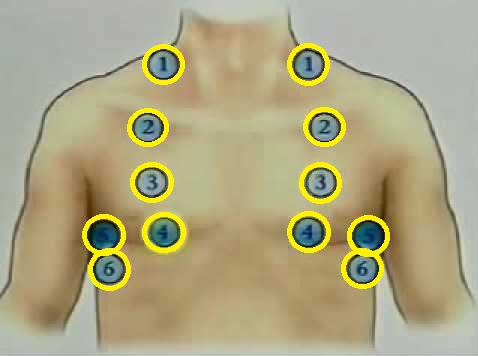
**Blueprint for N110 Exam 2**

1. **Maslow’s hierarchy of needs (basic)**
   * ***Know most important, and the one that takes the longest to attain***
     + Most important = physiologic
     + Hardest to attain = self-actualization
   * Hierarchy:
     + Physiologic Needs
       - necessary for survival – air, food, water, shelter, rest, sleep, activity, and temperature maintenance
     + Safety and Security Needs
       - physical/psychosocial – environment/relationships
     + Love and Belonging Needs
       - Giving/receiving affection, attaining a place in a group, maintaining a feeling of belonging
     + Self-Esteem Needs
       - for self: feelings of independence, competence, and self respect; from others: recognition, respect, appreciation
     + Self-Actualization Needs
       - Innate need to develop one’s maximum potential and realize one’s abilities and qualities
   * Nurses use this framework:
     + To respond therapeutically to client needs
       - To prioritize and plan interventions
       - To assess behaviors
     + To understand themselves and their own responses to needs
2. **Risk factors, what they mean for an individual?**
   * Risk factors = practices that have potentially negative effects on health
     + Overeating, getting insufficient exercise, being overweight 🡪 risk factors for heart disease, arteriosclerosis, diabetes, HT
     + Smoking 🡪 risk factor for lung cancer, emphysema, and CVD
   * Risk assessment helps the nurse ID individuals (and groups) at higher risk than the general population of developing specific health problems
   * Vulnerability to risks based on:
     + Maturity factors
       - Developmental level influences risk (i.e. – teen moms; children; older adults)
     + Heredity factors
       - Nurses must take thorough family health Hx to determine these risk factors
     + Sex or ethnicity
       - i.e. – males at risk to develop CVD earlier than females; females at greater risk for osteoporosis; people of African descent at risk for Sickle cell Dz
     + Sociologic factors
       - Poverty 🡪 impaired access to resources
     + Lifestyle factors
       - Sources of risk for preventable dz (some cancers, CVD, DM2, tooth decay, etc)
       - Nurses can disseminate info to try and alter this type of risk factor
3. **Healthy People 2010/2020 why developed?**
   * The long and short of it: Healthy People 2010/20 were **developed for HEALTH PROMOTION**
     + And based on the belief that individual health is closely linked to community health and the reverse
   * History:
     + The *Healthy People* initiative began in 1979 (it was the surgeon general’s report emphasizing health promotion/dz prevention)
       - This was the initial expression of the vision of Health Promotion
     + This was followed by *Healthy People 2000* (it provided a framework for national health promotion, health protection, and preventive service strategy)
   * *Healthy People 2020*
     + Vision: A society in which all people live long, healthy lives
     + Mission:
       - ID national health priorities
       - Increase public health awareness including opportunities for progress
       - Provide health objectives/goals
       - Engage multiple sectors in improvement of policies and practices
         * Business, local government, and civic, professional, and religious organizations can all participate
       - ID critical research, evaluation, and data collection needs
     + Overarching goals:
       - Improve the length and quality of life
       - Achieve health equality
       - Create social and physical health-promoting environments
       - Promote quality of life, health development, and healthy behaviors across all life stages
4. **Types of family units**
   * Nuclear
   * Extended
   * Traditional
   * Two-career
   * Single parent
   * Adolescent
   * Foster
   * Blended
   * Intragenerational
   * Cohabiting
   * Gay and lesbian
   * Single adults living alone
5. **Abnormal physical assessment findings**
   * ***That you might find on a basic assessment of middle-age adult ~ 50y old***
   * Middle-age Adult Physical Assessment Includes:
     + Weight, vital signs, vision and hearing
     + Knowledge and attitudes about sexuality
     + Changes in eating, elimination, exercise
   * Middle-age adult Selected Health Problems:
     + Injuries
     + Cancer
       - Cancer of the lung and bladder (men)
       - Breast cancer followed by cancer of the colon and rectum, uterus, and lung (women)
     + Cardiovascular disease
     + Obesity
     + Alcoholism
     + Mental health alterations
       - Anxiety
       - Depression
   * Sample questions:
     + **Q:** A 45 year old woman is worried she still has her period and asks about menopause. Which answer by the nurse is most appropriate?
       - **A:** “It is common for women to experience menopause in their late 40s.”
         * **Rationale:** This is a normal finding – menopause avg onset around 47y
       - **Q:** The routine physical exam of a female client between the ages of 25 and 64 is most likely to reveal that the client has which type of cancer: Cervical, Lymphoma, Lung, or Colon?
         * **Q:** Lung Cancer

**Rationale:** Lung cancer is increasingly common in women. Cervical cancer is most prevalent in younger women and is detected with a Pap smear (not on a routine physical).

1. **Abnormal blood pressure symptoms**
   * Hypertension
     + (140+ / 90+) (Usually asymptomatic)
     + Headache
     + Ringing in ears
     + Flushing of face
     + Nosebleeds
     + Fatigue
   * Hypotension
     + (Systolic 85-110 when normal BP is usually higher)
     + Tachycardia
     + Dizziness
     + Mental confusion
     + Restlessness
     + Cool/clammy skin
     + Pale/cyanotic skin
     + Feeling faint/actually fainting
2. **Physiologic changes associated with older adults**
   * ***Sleep patterns (getting up earlier, napping more); dry skin; constipation; change in appetite; hard of hearing/seeing***
   * Integumentary Changes
     + Skin dryness, pallor, fragility
     + Wrinkling and sagging
     + Age spots
     + Decreased perspiration
     + Thinning, graying of body hair
     + Slower growth and thickening of nails
     + Health Promotion Measures:
       - No daily bath, 2x week shower, unscented soaps
       - Inspect fragile slow to heal skin daily, protect from trauma, keep warm, sunscreen, lubricants
       - Nail care, podiatry consult
       - In hot weather, monitor for heat intolerance
   * Neurological Changes
     + Shorter sleeping periods
     + Slowed reaction times
     + Impaired balance
     + Decreased ability to respond to multiple stimuli
     + Greater difficulty with complex learning/abstraction
     + Implications: short teaching sessions, keep it simple
   * Musculoskeletal Changes
     + Bone demineralization - Osteoporosis
     + Intervertebral space narrowing
     + ↓ Muscle mass, strength & speed
     + Loss of height
     + Joint stiffness
     + ↓ Joint mobility
     + ↓ ROM
     + ↓ Reaction time
   * Sensory-Perceptual Changes
     + Loss of visual acuity
     + Increased sensitivity to glare
     + Decreased ability to adjust to darkness
     + Arcus senilis
     + Presbycusis
     + Decreased sense of taste and smell
     + Increased threshold for pain, touch, and temperature
   * Pulmonary Changes
     + Decreased ability to expel accumulated matter
     + Decreased lung expansion
     + Less effective exhalation
     + Dyspnea with exertion
     + Health promotion
       - Monitor respiratory status , auscultate lung sounds, flu & pneumonia vaccines
       - Avoid people with resp. infections
       - Humidify room air, fluid intake sufficient to liquefy secretions, sit upright for meals
   * CV Changes
     + Reduced cardiac output
     + Diminished baroreceptor response- orthostatic hypotension, rise slowly
     + Reduced elasticity- ↑ BP
     + Increased rigidity of arteries
     + High risk for irregular heart rhythms
   * Gastrointestinal Changes
     + Delayed swallowing time
     + Diminished gag reflex
     + Delayed gastric emptying
     + Increased indigestion
     + Decreased motility / peristalsis
     + Health Promotion
       - adequate fiber/fluids
       - assess mucous membranes,
       - remain upright after meals
       - monitor for choking
   * Urinary Changes
     + ↓ renal clearance
     + Impaired renal function
     + Urgency and frequency
     + Nocturia
     + Retention
   * Genital Changes
     + Prostate enlargement
     + Atrophy of vulva, cervix, uterus, fallopian tubes, ovaries
     + Reduction in vaginal secretions
     + Changes in vaginal flora
     + Changes in sexual functioning
   * Immunological Changes
     + Decreased immune system function
     + Lowered resistance to infection
     + Poor response to immunizations
     + Decreased stress response
   * Endocrine Changes
     + Increased insulin resistance
     + Decreased thyroid function
3. **Development of self concept**
   * ***How do you develop that? Associated with middle/older age***
   * Self-concept = the collection of ideas, feelings, and beliefs on has about oneself.
   * How do you develop it?
     + Develop self-awareness
     + Successfully cope with developmental tasks of one’s life-stage
       - For an adult, this involves internalizing the standards of society
   * Examples of positive self-concept development:
     + Middle adults (generativity vs. stagnation)
       - being willing to share with another person
       - guiding others
       - establishing a priority of needs recognizing both self and other
     + Older adults (ego integrity vs. despair)
       - using past experience to assist other***s***
       - maintaining productivity in some areas
       - accepting limitations
4. **Erickson’s stages of psycho-social development as it relates to middle and older adults**
   * ***Just the basic concept – X vs. Y and the little blurb that goes with it***
   * Middle Adults – Generativity vs. Stagnation
     + Establishing / guiding next generation
     + accepting middle age changes
     + creativity, productivity
     + being comfortable with spouse
     + On the other hand, if a middle adult experiences stagnation it is usually as the result of a self-centered existence
   * Older Adults – Ego Integrity vs. Despair
     + Older adult can look back with sense of satisfaction & acceptance of life & death.
     + Reminiscence- life review
     + On the other hand, if an older adult despairs they may believe they have made poor life choices and wish they could live it over again
5. **The elderly and family relationships**
   * ***Live alone but aren’t doing well then have to go live w family and how they respond to family/caregivers***
   * Fact: 80% of the care of older adults in the US is provided by their families
   * Developmental Tasks r/t family: Adjusting to new relationships with adult children; adjusting to more leisure time; adjusting to loss of independence; coping with relocation stress; making satisfying living arrangements; finding meaning in life
   * Possible NDx - Anxiety, social isolation, economic difficulties, Risk for relocation stress syndrome, Risk for falls (over 70y)
     + More on relocation:
       - Making the decision to move, whatever the reason, is stressful.
       - Some older adults need to move closer or in with their children for general support and supervision – which is a difficult and stressful decision to make.
       - When older adults can no longer care for themselves (due to problems with immobility and memory impairment, for example) they must relocate to long-term care facilities.
     + More on independence:
       - It is important to most older adults that they look after themselves even if they struggle to do so
         * It is therefore necessary for the family and/or nurse to encourage older adults to do as much for themselves as possible, as long as it is safe.
       - Many young people think they are being helpful in taking over tasks for older adults, but really this robs them of independence
6. **Types of rashes & characteristics**
   * ***(Skin Lesion Handout from Professor O)***
   * Macule
     + Flat, nonpalpable change in skin color, smaller than 1cm
     + Ex: freckle; petechia
   * Papule
     + Palpable, circumscribed, solid elevation in skin, smaller than 0.5cm
     + Ex: elevated nevus (birthmark)
   * Nodule
     + Elevated solid mass, deeper and firmer than papule, 0.2-0.5cm
     + Ex: wart
   * Tumor
     + Solid mass that may extend deep through subcutaneous tissue, larger than 1-2cm
     + Ex: epithelioma
   * Wheal
     + Irregularly shaped, elevated area or superficial localized edema, varies in size
     + Ex: hive, mosquito bite
   * Vesicle
     + Circumscribed elevation of the skin filled with serous fluid, smaller than 0.5cm
     + Ex: herpes simplex, chickenpox
   * Pustule
     + Circumscribed elevation of skin similar to vesicle but filled with pus, varies in size
     + Ex: acne, staphylococcal infection
   * Ulcer
     + Deep loss of skin surface that may extend to dermis and frequently bleeds and scars, varies in size
     + Ex: venous stasis ulcer
   * Atrophy
     + Thinning of skin with loss of normal skin furrow with skin appearing shiny and translucent, varies in size
     + Ex: arterial insufficiency
   * Fissure
     + A crack or cut
7. **Breath sounds Normal and where they are found on the body**
   * ***See diagram of where to auscultate breath sounds***
   * Normal breath sounds
     + Bronchial
       - Heard over trachea
       - High pitch, loud, hollow, expiration longer than inspiration
     + Bronchovesicular
       - Heard over main stem bronchus and between scapulae
       - Medium pitch, expiration equals inspiration
     + Vesicular
       - Heard over most of lung field
       - Low pitch, soft & breezy, soft & short expiration, inspiration 2x longer than inspiration
   * Diagram
     + 1 = supraclavicular area, between the midclavicular line and the midsternal line
     + 2 = 1st intercostal space (subclavicular area) just below the clavicles between the midclavicular line and the midsternal line
     + 3 = 3rd intercostal space between midclavicular and midsternal line
     + 4 = 4th intercostal space between midclavicular and midsternal line
     + 5 = 4th intercostals space at the anterior axillary line
     + 6 = 5th intercostal space at the anterior axillary line
8. **Assessing oxygen needs of a patient**
   * ***Inspection (observing for cyanosis; rapid respiratory rate; using accessory muscles; SpO2, ABGs)***
   * Nursing Assessment of Oxygenation status:
     + Nursing History
       - Current/past respiratory problems
       - Lifestyle
       - Presence of cough, sputum (coughed up material), or pain
       - Medications r/t breathing
       - Risk factors
         * family Hx of lung cancer, CVD or TB; smoking; obesity; sedentary lifestyle; diet high in saturated fats
     + Physical Exam
       - Inspection
         * Skin color – check for cyanosis
         * Mucus membranes – check for pinkness
         * Rate, depth, rhythm, quality of respirations

Shallow breaths? Using accessory muscles?

* + - * + position the client uses for breathing
        + Variations in thoracic shape that may indicate adaptation to chronic respiratory conditions (i.e. – barrel chest 🡪 COPD)
      * Palpation
        + For bulges, tenderness, or abnormal movements
        + For vocal fremitus
      * Percussion
        + For diaphragmatic excursion (the movement of the diaphragm during maximum inspiration/expiration)
      * Auscultation
        + For normal vs. abnormal vs. adventitious breath sounds
    - Diagnostic Studies
      * As ordered by the provider (i.e. – ABGs; sputum samples; cultures, etc.)
      * SpO2 is normally sufficient, and also much more noninvasive
      * Pulmonary Function Tests (measure lung volume and capacity)
        + Client breathes into a machine – nurse must explain procedure to client, but respiratory therapist performs test

1. **Monitoring of oxygen needs & modes of delivery**
   * ***ABGs and SpO2; nasal cannula, venti mask, 100% non-rebreather, etc***
   * Monitoring O2 needs
     + ABGs – blood taken directly from the radial, brachial, or femoral arteries or from catheters placed in these arteries. Specimens are taken by specialty nurses/respiratory therapists/medical technicians.
     + SpO2 – a noninvasive way to monitor oxygenation. Device placed on fingertip.
   * Modes of O2 delivery (all low-flow devices, except for Venturi (venti) mask with large-bore tubing)
     + Nasal cannula
       - Most common device
       - Delivers 24-45% O2
       - Flow rate of 2-6 L/min
       - Can be drying/irritating to mucous membranes
       - Not able to deliver high concentrations of O2
         * (except for reservoir nasal cannulas, which conserve O2 on exhalation and deliver a 100% O2 bolus on inspiration)
     + Face Mask
       - Simple face mask
         * Delivers 40-60% O2
         * Flow rate of 5-8 L/min
       - Partial rebreather mask
         * Delivers 40-60% O2
         * Flow rate of 6-10 L/min
         * Has a reservoir bag that allows mixing of some of exhaled air with O2
       - Non-rebreather mask
         * Delivers 95-100% O2

the highest oxygen concentration possible without intubation/mechanical ventilation

* + - * + Flow rate of 10-15 L/min
        + Has one-way valves on the mask and between the reservoir bag and the mask to prevent entry of room air into the mask and exhaled air into the bag

Therefore, the bag contains 100% O2

* + - * Venturi (Venti) mask
        + Delivers 24-40 or 50% O2
        + Flow rate of 4-10 L/min
        + Uses color-coded jet adaptors that correspond to O2 concentration and flow
    - Face Tent
      * An alternative to face masks when poorly tolerated by clients
      * Deliver varying concentrations of O2 (i.e. 30-50% at a rate of 4-8 L/min)
    - Transtracheal catheter
      * Placed through a surgically created tract into the trachea
      * Once it matures (heals), the client removes and cleans it 2-4 times a day
      * If flow rate greater than 1 L/min, it should be humidified (high flow rates [15-20 L/min] can be delivered)
    - Noninvasive positive pressure ventilation (NPPV)
      * i.e. – CPAP machine (Continuous Positive Airway Pressure); or BiPAP machine (Bilevel Positive Airway Pressure)
      * Conditions requiring this mechanical breathing assistance include respiratory failure, pulmonary edema, COPD, and sleep apnea

1. **Managing patients with secretions**
   * ***Encourage secretions***
     + ***Thick 🡪 increased intake of fluid; humidification***
     + ***Turning the patient***
   * Changing positions frequently, ambulating, and exercising
   * Deep-breathing and coughing
   * Maintaining adequate hydration
     + IVF as ordered, offering water at regular intervals; use of a humidifier
   * Administering medications as ordered
     + Bronchodilators, leurkotreine modifiers, and expectorants (etc) can help patients with secretions
   * Incentive spirometry
     + In relation to secretions, this can help to loosen them
   * Mucus Clearance Devices (MCD)
     + Used for patients with excessive secretions (cystic fibrosis, COPD, bronchiectasis)
     + This is a handheld device that contains a steel ball – when the patient exhales fast into this device, the vibrations of the steel ball causes airway mucus to loosen, and assists mucus movement up the airways to be expectorated
   * PVD = percussion, vibration, and postural drainage
     + Percussion (aka clapping)
       - forceful striking of the skin with cupped hands (produces a hollow, popping sound)
       - This can mechanically dislodge tenacious secretions from the bronchial walls – so percuss over congested lung areas
       - Technique:
         * fingers and thumbs held together and flexed slightly to form a cup
         * Cover area with a towel or gown; ask patient to breathe slowly and deeply
         * Percuss each affected lung segment for 1-2 minutes
     + Vibration
       - A series of vigorous quivering produced by hands that are placed flat against the client’s chest wall
       - Normally used after percussion to increase the turbulence of the exhaled air and therefore loosen thick secretions
       - Technique:
         * Place one hand over the other, palms down, over the affected area
         * Ask the client to inhale deeply and exhale slowly through the nose or pursed lips
         * During exhalation, tense all the hand and use arm muscles and vibrate the hands, moving them downward (use mostly the heel of the hand)
         * Stop when the client inhales
         * Vibrate during 5 exhalations over one affected lung segment, then encourage the client to cough and expectorate sputum.
     + Postural drainage
       - Drainage of secretions from various lung segments by gravity.
       - This is accomplished by changing positions – and the position required varies by the area that needs to be cleared
       - Secretions in the trachea and main bronchi are usually coughed into the pharynx where they can be swallowed, expectorated, or effectively removed by suctioning
   * Suctioning
     + The aspiration of secretions through a catheter connected to a suction machine or wall suction outlet
     + Used when patients have difficulty handling their secretions or when artificial airways are in place
       - The nurse must assess the client for evidence that he/she is unable to cough up and/or expectorate secretions
       - Dyspnea, bubbling or rattling breath sounds, cyanosis, or decreased SpO2 levels may indicate the need for suctioning
     + Requires sterile technique
2. **Foods high in protein**
   * Beans, nuts and seeds, legumes, grains (quinoa is a complete protein), all animal products (meat, fish, dairy, eggs)
3. **Different types of diets**
   * ***Low cholesterol, regular, soft, etc.***
   * ***\*full liquid vs. clear liquid\* i.e. creamy soup and milk for full liquid but not clear liquid***
   * Types of Diets
     + Clear Liquid
       - A short-term diet
       - Includes: Water, tea, coffee, clear broths, ginger ale, strained and clear juices, plain gelatin
       - Clear does not mean colorless
     + Full Liquid
       - Liquids, and foods that are liquid at body temperature
       - Includes: All items on clear liquid diet, plus milk, puddings, ice cream/sherbet, vegetable juices, strained cereals, cream, butter/margarine, smooth peanut butter, yogurt
     + Soft
       - Easily chewed and digested
       - Includes: All items on full/clear liquids diets, plus chopped/shredded meat, soft-cooked eggs, soft cheeses, soft vegetables, soft fruits, breads and cereals, and soft desserts like cake
     + Vegetarian
       - Lacto-ovo, lacto, ovo, macrobiotic, semivegetarian, pesco-vegetarian, vegan (no animal products)
     + Low cholesterol
       - Won’t have a lot of animal products, if any. Plant-based foods do not contain cholesterol
       - Egg whites will be served instead of whole eggs (the cholesterol is in the yolk)
       - Fat free milk still contains cholesterol, but much less than in whole milk – soy milk can be given as a cholesterol-free milk alternative
4. **Foods high in cholesterol**
   * ***Egg, cheese, peanut oil –*** *Professor S used peanut oil as an example in class, but only animal products contain cholesterol.*
   * Foods listed in Kozier:
     + Milk, egg yolk, organ meats
5. **Maintaining good bowel function**
   * ***What do you do?***
     + ***Activity, Eat right, High fiber, Fluids***
   * Older adult considerations
     + Constipation is a significant health problem in older adults, due in part to decreased activity, inadequate fluid and fiber intake, and muscle weakness.
     + Older adults also experience “bowel fixation”
     + The older adult should be warned that consistent use of laxatives inhibits natural defecation reflexes, and can actually cause constipation
   * Diet
     + Intake bulk (cellulose, fiber) to maintain stool volume
       - Insoluble Fiber
         * Promotes movement of material through GI tract and increases bulk; does not dissolve in water
         * Sources: whole-wheat flour, wheat bran, nuts, many veggies
       - Soluble fiber
         * Attracts water and forms a gel; helps you feel full; it can also help lower blood cholesterol and glucose levels
         * Sources: oats, peas, beans, apples, citrus fruits, carrots, barley, psyllium
     + Don’t eat foods you can’t digest (i.e. – milk if you are lactose intolerant)
     + Eat at regular intervals
     + Avoid spicy foods, excessive sugar, gas-producing foods, and foods that have a laxative or constipating effect (depending on what your problem is)
   * Fluids
     + Inadequate hydration causes constipation
     + Drink 2-3 L a day
   * Activity
     + Stimulates peristalsis
     + Strong abdominal and pelvic muscles facilitate defecation
     + Clients confined to bed are often constipated
   * Psychological Factors
     + Anxiety, anger 🡪 diarrhea
     + Depression 🡪 constipation
   * Defecation Habits
     + The gastrocolic reflex (increased colon peristalsis after eating) is normally strongest after breakfast
     + Ignoring the urge to defecate can cause constipation “Heed the Call!”
       - The longer the urges are ignored, the weaker the bowel reflexes become, and ultimately the urge to defecate is lost
     + There are many psychological reasons why the urge may be ignored
   * Medications
     + Many meds interfere with normal defecation
       - Narcotics cause constipation
       - Iron supplements cause constipation
       - Obviously, laxatives stimulate bowel activity
       - Antimotility agents are used to treat diarrhea
     + Some also affect the appearance of feces
       - Aspirin 🡪 red or black (GI bleeding)
       - Iron salts 🡪 black (oxidation of iron)
       - Antibiotics 🡪 gray-green
       - Antacid 🡪 whitish, white specks
       - Pepto-Bismol 🡪 black
6. **Urinary problems that occur more frequently in women**
   * **UTI** (urinary tract infection) more common in woman due to woman having a shorter urethra
7. **Urinary problems and their causes**
   * ***Has to do with the bladder and its muscle tone – know those slides***
   * Polyuria( or diuresis)- refers to the production of abnormally large amounts of urine by the kidneys, often several liters more than the client’s usual daily output.
     + Associated with DM, diabetes insipidus, chronic nephritis.
     + Can also be associated with polydipsia (excessive fluid intake)
   * Oliguria-low urine output usually less than 500ml/day or 30ml/hr for an adult.
     + Associated with chronic renal insufficiency, and may be indicative of impending renal failure
     + May also occur because of abnormal fluid loss or lack of fluid intake
   * Anuria-lack of urine production.
     + Associated with renal failure
   * Frequency –voiding at frequent intervals, more than four to six times/day.
     + Associated with increased fluid intake, UTI, stress, and pregnancy
   * Nocturia- voiding two or more times at night.
   * Urgency- the sudden, strong desire to void.
     + Associated with UTI, psychological stress, irritation of the trigone and urethra, and in people who have poor external sphincter control and unstable bladder contractions
   * Dysuria- voiding that is either painful or difficult. Clients say they need to strain to void, or that burning accompanies or follows voiding.
     + UTI, urethral spasms (which can also cause difficulty initiating flow), urethral stricture (decrease in caliber), and bladder/urethra injuries.
   * Enuresis- involuntary urination in children beyond the age when voluntary bladder control is normally acquired, usually 4-5 years of age.
     + Associated with difficult access to toilet facilities, home stresses, illness
   * Incontinence- (UI) - involuntary leakage of urine or loss of bladder control, is a health symptom not a disease.
     + Women are more likely to experience it than men because of shorter urethras, damage to the pelvic floor associated with childbirth, and menopausal changes
     + Common causes: UTI, urethritis, pregnancy, hypercalcemia, hypervolemia, delirium, restricted mobility, stool impaction, and psychological causes.
   * Hesitancy- a delay and difficulty initiating urination
     + Associated with dysuria
   * Urinary Retention – impaired bladder emptying
     + Associated with prostatic hypertrophy, surgery, and some medications
   * Neurogenic Bladder- impaired neurologic function can interfere with the normal mechanisms of urine elimination. The client does not perceive bladder fullness and is therefore unable to control the urinary sphincters.
     + ALS, para/quadraplegics, spinal tumors
   * UTI (urinary tract infection) more common in woman due to woman having a shorter urethra
8. **Influences on urinary elimination (Literally, know the slide)**
   * Developmental factors
     + Children and older adults are at risk for experiencing enuresis or incontinence, respectively
   * Psychosocial factors
     + Privacy, normal position, sufficient time…
       - Circumstances that interrupt these conditions can cause muscle tension due to anxiety – known as “shy bladder”
     + People may voluntarily suppress urination because of perceived time pressures
       - This increases the risk for UTIs
   * Fluid and food intake
     + Increase fluid intake (esp. caffeine or alcohol) 🡪 increase urine output
     + Increase sodium intake 🡪 decrease urine output
     + Eating beets 🡪 red urine
     + Carotene 🡪 extra-yellow urine
   * Medications
     + ANS medications will affect urination, one way or the other
       - i.e. – cholinergics 🡪 urinary incontinence; anticholinergics 🡪 urinary retention
     + Diuretics 🡪 increased urine formation
   * Muscle tone
     + Long-term catheterization can decrease bladder muscle tone
     + Pelvic muscle tone can be increased by kegel exercises
   * Pathologic conditions
     + Kidney disease 🡪 oliguria, anuria
     + CVD 🡪 decreased blood flow to kidneys
     + Hypovolemia 🡪 urinary output reduced
     + Urinary stones (calculi) 🡪 may block urine flow
     + Prostatic hypertrophy 🡪 may obstruct urethra
   * Surgical and diagnostic procedures
     + Urinary tract surgery 🡪 hematuria
     + Cystoscopy 🡪 urethral inflammation
     + Spinal anesthetics 🡪 decrease urge
     + Lower abdominal surgery 🡪 swelling 🡪 can affect voiding
9. **Know normal urine specific gravity**
   * 1.010-1.025
10. **Urinary incontinence**
    * ***Know what you do for it, and Causes – spinal cord damage, loss of sphincter control***
    * Common causes: UTI, urethritis, pregnancy, hypercalcemia, hypervolemia, delirium, restricted mobility, stool impaction, and psychological causes.
    * There are 2 types of UI
      + Acute (transient) UI
        - Reversible
        - Contributing factors: use TOILETED mnemonic:
          * T – Thin and dry vaginal/urethral epithelium
          * O – Obstruction (fecal)
          * I – Infection (UTI)
          * L – Limited mobility
          * E – Emotional/psychological factors
          * T – Therapeutic medications (diuretics, tranqs)
          * E – Endocrine disorders (diabetes)
          * D - Delirium
      + Chronic (established) UI
        - Many types, each with different etiologies
          * *Functional Urinary Incontinence*

r/t immobility

* + - * + *Overflow Urinary Incontinence*

r/t overdistention of the bladder secondary to urinary retention

* + - * + *Reflex Urinary Incontinence*

r/t involuntary voiding when a specific bladder volume is reached secondary to spinal cord injury

* + - * + *Stress Urinary Incontinence*

r/t activities that increase intra-abdominal pressure secondary to pregnancy

* + - * + *Urge Urinary Incontinence (*and *Risk for Urge Urinary Incontinence)*

r/t strong sense of urgency to void, secondary to UTI

* + - * + *Total Urinary Incontinence*

r/t loss of muscle control secondary to ALS

* + - * + *Urinary Retention*
  + Managing it: (See Kozier p. 1318)
    - Bladder (continence) training - *Improving bladder function for those with urge urinary incontinence by increasing bladder’s ability to hold urine and the client’s ability to suppress urination*
      * Delayed voiding
      * Resist/inhibit sensation of urgency
      * Voiding according to timetable
      * Habit training
      * Prompted voiding - *Promotion of urinary continence through the use of timed verbal toileting reminders and positive social feedback for successful toileting*
        + Positive reinforcement
    - Pelvic muscle exercises - *Strengthening and training the levator ani and urogenital muscles through voluntary repetitive contraction to decrease stress, urge, or mixed types of urinary incontinence*
    - Maintaining skin integrity
      * Moisture 🡪 maceration (softening) and irritation
      * Meticulous skin care is required for incontinent patients, after every episode of incontinence
    - Applying external urinary drainage devices
      * For males
      * i.e. – condom catheter, external catheter
      * This is preferable to insertion of a retention catheter because risk for UTI is minimized

1. **Stress, relaxation techniques, interventions**
   * ***Non-medical interventions***
     + ***Yoga, meditation, reiki***
   * Stress
     + Psychological Indicators:
       - Anxiety (mild, moderate, severe, panic)
       - Fear
       - Anger
       - Depression
       - Unconscious ego defense mechanisms (compensation, denial, displacement, identification, intellectualization, introjection, minimization, projection, rationalization, reaction formation, regression, repression, sublimation, substitution, undoing – see Table 42-3 for explanations)
     + Cognitive Indicators:
       - Problem-solving
       - Structuring
       - Self-control or self-discipline
       - Suppression
       - Fantasy/daydreaming
   * Relaxation Techniques
     + Breathing exercises
     + Massage
     + Progressive relaxation
     + Imagery
     + Biofeedback
     + Yoga
     + Meditation
     + Therapeutic Touch
     + Music therapy
     + Humor and laughter
   * Interventions
     + Physical exercise
     + Optimal nutrition
     + Adequate rest and sleep
     + Time management
     + Minimizing anxiety
     + Mediating anger
     + Using relaxation techniques (named above)
     + Crisis intervention: counseling, home visits
2. **Physiologic reactions to stress**
   * ***Table in book with these reactions***
     + ***Fast HR, el BP, respirations, pulse, Dilated pupils***
   * Physiologic Stress Indicators:
     + Pupils dilate (increased visual perception of serious threats)
     + Sweat production increases (increased metabolism 🡪 increased temp)
     + Heart rate and cardiac output increase (increased metabolism 🡪 more metabolic byproducts)
     + Skin is pallid (constriction of peripheral blood vessels)
     + Sodium and water retained (release of mineralocorticoids)
     + Rate and depth of respiration increase (bronchiole dilation)
     + Urinary output decreases (PSNS inhibited)
     + Mouth may be dry (PSNS inhibited)
     + Peristalsis of the intestines decrease (PSNS inhibited)
     + Mental alertness improves for serious threats
     + Muscle tension increases (preparation for rapid motor activity or defense)
     + Blood sugar increases (release of glucocorticoids, gluconeogenesis)
3. **Pain and nurse patient relationship**
   * ***Specific thing – the patient needs to trust the nurse and not feel as if they’re being judged (everyone experiences pain differently)***
   * Practice Guidelines for nursing management of pain
     + Establish trusting relationship
     + Consider ability and willingness to participate
     + Use a variety of pain relief measures
     + Provide pain relief before pain is severe
     + Use pain relief measures client believes are effective
     + Align pain relief measures with pain severity
     + Encourage to try ineffective measures again before abandoning
     + Maintain unbiased attitude about what may relieve pain
     + Keep trying
     + Prevent harm
     + Educate client / caregiver about pain
   * If there is not a trusting relationship, the patient may not report pain, or be able to address misinformation or misconceptions about pain
4. **Pain control**
   * ***Different types***
   * Pharmacological
     + Non-opioids (NSAIDs)
     + Opioids
     + Mixed opioids (opioid + adjuvant, such as acetaminophen)
   * Non-pharmacological
     + Physical
       - Heat/cold
       - Cutaneous stimulation
       - Positioning and exercises
       - TENS
       - Massage
       - Elevating legs, pillow beneath knees
       - Nerve Blocks (an invasive, last-resort technique)
     + Cognitive-behavioral
       - Distraction (i.e. TV)
       - Eliciting relaxation response –(i.e. - Deep Breathing)
       - Re-pattern thinking
       - Facilitating Coping with emotions
     + Lifestyle pain management
       - Stress management
       - Exercise
       - Nutrition
       - Pacing activities
       - Disability management
     + Spirit Interventions
       - Prayer
       - Meditation
       - Self-Reflection
       - Meaningful rituals
       - Energy work (reiki)
     + Social Interaction
       - Functional restoration
       - Improved communication
       - Family Therapy
       - Problem-solving
       - Vocational training
       - Volunteering
       - Support groups
5. **Pain assessment prior to administration of opioids**
   * **Opioids *is a key word… RESP RATE (not <12)***
   * Pain assessment involves:
     + Pain scale
     + Vital Signs
     + Location of pain
     + Characteristics of pain (sharp, dull, burning)
   * Effects of narcotics
     + Sedation
     + Decreased respirations!!!
     + Urinary retention
     + Constipation
     + Nausea/vomiting
     + Fear of addiction
       - Therefore…don’t give a patient a narcotic if assessment reveals any of the above physiological signs. The fear of addiction must also be addressed – high doses or long length of treatment may cause addiction, but it does not normally occur in short-term use
6. **Interventions for insomnia**
   * ***Several slides***
     + ***Not taking naps during day, not drinking caff after a certain hr, stop drinking after dinner, having a routine***
   * General Nursing Interventions for sleep disturbances:
     + Creating a restful environment
       - Reducing environmental distractions, Comfortable room temperature, Appropriate ventilation, Appropriate lighting
     + Promoting bedtime rituals
       - Listening to music, reading, soothing bath, praying
     + Providing comfort measures
       - Ensure a safe environment, have a concerned caring attitude
     + Scheduling nursing care to promote uninterrupted sleep
     + Physical activity during the day
     + Sleep medications, if appropriate
       - Sedative-hypnotics, anti-anxiety or tranqs (request an antihistamine if appropriate)
     + Client Education
       - Stress reduction, relaxation techniques or good sleep hygiene
       - The importance of sleep
       - Conditions that promote sleep
       - Safe use of sleep meds and their effects
       - Effects of disease states on sleep
7. **Symptoms of sleep apnea**
   * ***You’re assessing the patient and he tells you he has sleep apnea***
     + ***What are the physical signs of this (inside their mouths)***
   * Physical signs of sleep apnea
     + Enlarged and reddened soft palate and uvula
     + Enlarged adenoids and tonsils
     + Obesity (adults)
     + Neck circumference > 17.5” (men)
     + Deviated Septum (occasionally)
   * PMH:
     + Snoring
     + Frequent awakenings
     + Difficulty falling asleep
     + Morning headaches
     + Memory & Cognitive problems
     + Irritability
8. **Types of sleep disorders**
   * ***Sleep-walking, sleep-talking, narcolepsy (brief understanding)***
   * Sleep Disorders:
     + Hypersomnia
       - Sufficient sleep at night but cannot stay awake during day
       - Caused by medical or psychological disorders
     + Narcolepsy
       - Caused by lack of hypocretin in CNS that regulates sleep
       - Clients have sleep attacks
       - Sleep at night usually begins with sleep-onset REM period
     + Sleep Apnea
       - Frequent short breathing pauses during night
       - >5 apneic episodes > 10 sec/hr abnormal
       - Signs and symptoms: snoring, frequent awakenings, difficulty falling asleep, morning headaches, memory & cognitive problems, irritability
       - Types include obstructive, central, mixed
     + Insufficient Sleep
     + Parasomnias (behavior that may interfere with sleep)
       - Bruxism-grinding your teeth
       - Enuresis-bed-wetting
       - Periodic limb movement PLMD or RLS- restless leg syndrome
       - Sleep talking Sleepwalking
     + Insomnia
       - Difficulty falling/ staying asleep
       - Waking up frequently
       - Daytime sleepiness
       - Signs and symptoms:
         * Difficulty concentrating
         * Irritability
       - Risk factors
         * Older age
         * Female
       - TX
         * Develop new behavior patterns
9. **Spirituality and the nurse-patient relationship**
   * ***How do you tell cues for spirituality***
     + ***Bibles, icons, Koran***
     + ***Being open and allowing people to express their spirituality***
   * Clinical Assessment
     + May find cues to spiritual and religious preferences
       - Environment
       - Behavior
       - Verbalizations
       - Affect and attitude
       - Interpersonal relationships
   * Spiritual Practices affecting nursing care
     + Holy days
       - Day set aside for special religious observances
         * Fasting
         * Extended prayers
         * Rituals/reflection
         * Sabbath
         * Meditation
         * High holy days
     + Sacred writings
       - Provide guidance, admonitions, rules for living
       - Instructive stories of religious leaders/God
       - In most religions, these scriptures are thought to be the word of the supreme being as written down by prophets or other human representatives.
         * Christians rely on the Bible
         * Jews on the Torah and Talmud
         * Muslims on the Koran
         * Hindus have several holy texts, or Vedas
         * Buddhists value the teachings of the Tripitakas.
       - Scriptures generally set forth religious law in the form of warnings and rules for living i.e. the ten commandments
     + Sacred symbols
       - Pronounce one’s faith
       - Remind practitioner of faith
       - Spiritual protection
       - Source of comfort / strength
       - Part of personal place of worship
     + Prayer & meditation
       - Human communication w/ divine & spiritual entities
       - Loving wish or thought for oneself / another
     + Beliefs affecting diet & nutrition
       - Some religions have prescriptions regarding diet
         * Orthodox Jews are not to eat shellfish or pork
         * Muslims are not to drink alcoholic beverages or eat pork
         * Members of the Church of Jesus Christ of Latter-Day-Saints (Mormons) are not to drink caffeinated or alcoholic beverages
         * Older Catholics may choose not to eat meat on Fridays
         * Buddhists an Hindus are generally vegetarian
         * Jewish people require that food be Kosher , which is food prepared according to Jewish Law
       - Fasting
         * The ill are often excused from the practice of fasting by their respective spiritual cultures
     + Beliefs related to healing
       - Illness attributed to spiritual disruption
     + Beliefs related to dress
       - Conservative female dress
       - Head covering
     + Birth and Death
       - Rituals and ceremonies
   * Nursing implications
     + Be aware of, open to, and respectful of spiritual practices and their importance in clients’ lives
     + Make sure sacred symbols (amulets/rosaries/malas) aren’t thrown away accidentally
     + Try to accommodate religious/spiritual practices (such as fasting, taking communion) so long as they do not cause harm to the patient and interfere with care
     + “How would you like your health care team to support your spirituality?”
     + When nursing diagnoses pertain to spirituality, the overall goal is to maintain or restore spiritual well-being so that spiritual strength, serenity, and satisfaction are realized
     + The nurse can aid spiritual well-being by promoting a sense of hope: “Try to think positively.” Having a positive attitude yourself in the hopes that it will be contagious “Your family will be here today” “You didn’t have any diarrhea today”. “We’ll try to meet all of your needs.” Let the patient know you’re there for him/her
10. **Sexual history**
    * ***Doing something to promote a patient feeling comfortable talking to you about their sexuality***
      + ***Don’t look at pt funny***
    * Sexual Health History Assessment interview?
      + Are you currently sexually active? With men, women, or both?
      + With one or more than one partner?
      + Describe the positive and negative aspects of your sexual functioning
      + Do you have difficulty with sexual desire? Arousal? Orgasm? Satisfaction?
      + Do you experience any pain with sexual interaction?
      + If there are problems, how have they influenced how you feel about yourself? How have they affected your partner? How have they affected the relationship?
      + Do you expect your sexual functioning to be altered because of your illness?
      + What are your partner’s concerns about your future sexual functioning?
      + Do you have any other sexual questions or concerns that I have not addressed?
    * Related Questions:
      + Clients are least likely to introduce the topic of sex with health care providers for which of the following reasons?
        - They assume that health care providers know little about sexual functioning.
        - Most clients have few, if any, questions or problems.
        - Female clients prefer to discuss problems with female health care providers.
        - **They are too embarrassed to introduce the topic of sex.**
11. **Kubler-Ross stages of grief and dying**
    * ***Know the stages and that people go back-and-forth between them***
    * Denial
    * Anger
    * Bargaining
    * Depression
    * Acceptance
12. **Nurse patient relationship end of life**
    * ***How do you promote a good end of life for that patient – it is an inner knowing manifested by caring, not leaving a pt alone***
    * ***Provide presence***
    * Overall Goals for Dying Clients
      + Maintain physiologic & psychologic comfort
      + Achieving a dignified & peaceful death
        - Maintaining personal control
        - Accepting declining health status
    * Helping Clients Die with Dignity
      + Introduce options available to restore and support feelings of control
      + Assist clients to manage the events preceding death
      + Help clients to determine own physical, psychologic, and social priorities
      + Support will and hope
    * Physiologic needs of the dying
      + Pain control
      + Symptom control
        - N&V
        - Fatigue
      + Personal hygiene
      + Resp difficulties
      + Movement
      + Nutrition
      + Elimination